Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method, comprising:

receiving a packet fragment of a packet;

determining if said received packet fragment is a head fragment or a non-head fragment of said packet; and

if the received packet fragment is determined to be the head fragment of said packet:

processing the head fragment to determine a destination address for said head fragment and forwarding said head fragment to said determined destination address; and

applying said destination address for said head fragment, which was determined by said processing of said head fragment, to at least one corresponding non-head fragment of said packet that was stored prior to receiving said head fragment and to at least one non-head fragment of said packet that is received after said forwarding said head fragment.

2.   (Currently Amended) The method of claim 1 wherein processing the head fragment includes generating a session pointer data structure having the destination address, the method further comprising after processing the head fragment:

locating said destination address from the session pointer data structure that was generated during the processing of the head fragment; and

wherein said applying said destination address to said at least one corresponding non-head fragments includes applying the destination address located from said session pointer

data structure ~~to a corresponding non-head fragment subsequently received after receiving said head fragment~~ said non-head fragments.

3.   (Currently Amended) The method of claim 1 wherein <u>said</u> receiving <u>said</u> packet ~~fragments at comprises~~ fragment includes receiving <u>a fragment of an</u> IP-fragmented ~~packets~~packet.

4.   (Currently Amended) The method of claim 1 wherein the head fragment includes ~~substantially~~ all header information from said packet, and wherein the ~~at least one~~ non-head fragment<u>s</u> ~~includes~~ include packet data from said packet.

5.   (Currently Amended) The method of claim 1 wherein both the head and non-head fragments contain duplicative header information from said packet, wherein:
    said processing the head fragment includes processing one of the fragments having the header information as the head fragment; and
    said applying includes designating ~~another one~~ other ones of the fragments having the header information as the ~~at least one~~ non-head fragment<u>s</u>.

6.   (Currently Amended) The method of claim 1 wherein said applying includes updating a destination address field of the ~~at least one~~ non-head fragment<u>s</u> by overwriting said destination address into said destination address field.

7.   (Currently Amended) The method of claim 1 wherein said applying includes adding a routing tag to the ~~at least one~~ non-head fragment<u>s</u> that includes said determined destination address.

8.   (Currently Amended) The method of claim 1 wherein <u>said</u> processing the head fragment includes processing the head fragment according to at least one of Layer 4 through Layer 7 criteria.

9.   (Currently Amended) A method, comprising:

determining a destination address for a received head fragment of a packet;

forwarding said head fragment to said determined destination address; and

applying the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after said forwarding the head fragment and to any corresponding stored non-head fragment of said packet that is received prior to receiving the head fragment.

10.   (Previously Presented)   The method of claim 9, further comprising forwarding the non-head fragments having the determined destination address applied thereto.

11.   (Currently Amended) The method of claim 9, further comprising:

generating a session associated with the head fragment;

obtaining the destination address from the generated session, and wherein said applying the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after said forwarding the head fragment includes applying the destination address obtained from said session to said any corresponding non-head fragment received subsequently after said forwarding the head fragment; and

storing a plurality of corresponding non-head fragments if the session has not been generated, and wherein said applying the determined destination address to any corresponding stored non-head fragment of said packet includes subsequently applying the determined destination address to said stored plurality of non-head fragments after the session has been generated.

12.   (Previously Presented) The method of claim 9 wherein said applying the determined destination address to the non-head fragments includes overwriting a destination field of these non-head fragments with said determined destination address.

13.   (Currently Amended) An article of manufacture, comprising:

a computer-readable medium having instructions stored thereon that are executable by a processor to handle fragments, by:

determining if a fragment of a packet is either a head fragment or a non-head fragment;

processing the fragment if it is determined to be said head fragment to determine a destination address for said head fragment and forwarding said head fragment to said determined destination address; and

applying the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after said forwarding the head fragment and to any corresponding stored non-head fragment of said packet that is received prior to receiving the head fragment.

14.   (Previously Presented) The article of manufacture of claim 13 wherein the computer-readable medium further includes instructions stored thereon that are executable by said processor to handle fragments, by:

forwarding the non-head fragments having the determined destination address applied thereto.

15.   (Currently Amended) The article of manufacture of claim 13 wherein the computer-readable medium further includes instructions stored thereon that are executable by said processor to handle fragments, by:

generating a session associated with the head fragment;

obtaining the destination address from the generated session, and wherein said applying the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after said forwarding the head fragment includes applying the destination address obtained from said session to said any corresponding non-head fragment received subsequently after said forwarding the head fragment; and

storing a plurality of corresponding non-head fragments if the session has not been generated, and wherein said applying the determined destination address to any corresponding stored non-head fragment of said packet includes subsequently applying the determined destination address to said stored plurality of non-head fragments after the session has been generated.

16.   (Currently Amended) The article of manufacture of claim 13 wherein ~~the instructions to~~ said applying the determined destination address include~~s~~ ~~instructions to~~ applying a routing tag to the non-head fragments that includes said determined destination address.

17.   (Currently Amended) A system, comprising:

a means for determining if a fragment of a packet is either a head fragment or a non-head fragment;

a means for processing the fragment if it is determined to be a head fragment to determine a destination address for said head fragment;

a means for forwarding said head fragment to said determined destination address; and

a means for applying the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after said forwarding the head fragment and to any corresponding stored non-head fragment of said packet that is received prior to receiving the head fragment.

18.   (Currently Amended) The system of claim 17~~, further comprising a~~ wherein said means for forwarding further forwards the non-head fragments having the determined destination address applied thereto.

19.   (Currently Amended) The system of claim 17~~, further comprising~~ wherein said means for processing further:

~~a means for generating~~generates a session associated with the head fragment;

6

~~a means for obtaining~~obtains the destination address from the session, and

wherein said means for applying the determined destination address that includes said destination address to any corresponding non-head fragment of said packet that is received subsequently after <u>said forwarding</u> the head fragment applies the destination address obtained from said session to said any corresponding non-head fragment received subsequently after the head fragment; and <u>the system further comprising</u>:

a means for storing a plurality of corresponding non-head fragments if the session has not been generated, and wherein said means for applying the determined destination address to any corresponding stored non-head fragment of said packet subsequently applies the determined destination address to said stored plurality of non-head fragments after the session has been generated.

20.   (Currently Amended) A system, comprising:

an entry point to receive packet fragments of a packet;

a network device coupled to the entry point to determine if a packet fragment received at the entry point is a head fragment of said packet;

a storage unit coupled to the network device to store non-head fragments of said packet that are received at the entry point prior to <u>receipt of</u> said head fragment;

wherein the network device is adapted to forward the head fragment to be processed to determine a destination address for said head fragment; and

an exit point coupled to the network device, wherein said non-head fragments stored at the storage unit are updated at the exit point with said destination address that is determined from said processing of the head fragment<u>, the exit point being adapted to apply said determined destination address to at least one non-head fragment of said packet that is received after said head fragment is forwarded to said determined destination address</u>.

21.   (Currently Amended) The system of claim 20 wherein the network device ~~comprises~~ <u>includes</u> a switch <u>adapted to receive said fragments, which were fragmented from said packet by a router</u>.

22. (Currently Amended) The system of claim 20 wherein the entry and exit points ~~comprise~~ are included as parts of at least one software-based function.

23. (Previously Presented) The system of claim 20 wherein the processing of the head fragment includes at least one from a plurality of Layer 4 through Layer 7 processing.

24. (Previously Presented) The system of claim 20 wherein the processing of the head fragment to determine said destination address is performed in the network device.

25. (Previously Presented) The system of claim 20, further comprising at least another network device coupled to the exit point and being adapted to perform said processing of the head fragment.

26. (Previously Presented) The system of claim 20, further comprising another storage unit, coupled to the exit point, to store the destination address.

27. (Original) The system of claim 20, further comprising a software program to operate in conjunction with the network device to handle the non-head and head fragments.

28. (Currently Amended) An apparatus to handle packet fragments, the apparatus comprising:

a network device adapted to receive a head fragment of a packet, to process the received head fragment to determine a destination address for said head fragment and to forward the head fragment to said determined destination address, and to apply the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after the head fragment is forwarded and to any corresponding stored non-head fragment that is received prior to receipt of the head fragment.

29. (Currently Amended) The apparatus of claim 28 wherein said network device includes a switch adapted to receive said fragments, which were fragmented from said packet by a router.

30. (Currently Amended) The apparatus of claim 28 wherein said network device is adapted to ~~perform said application of~~ said apply said determined destination address by addition of a routing tag to said non-head fragments that includes said determined destination address.

31. (Currently Amended) The apparatus of claim 28 wherein said network device is adapted to said process said head fragment according to at least one of Layer 4 through Layer 7 criteria.

32. (Canceled)

33. (New) An apparatus to handle packet fragments, the apparatus comprising:

a switch adapted to receive a head fragment of a packet, to process the received head fragment to determine a destination address for said head fragment, and to apply the determined destination address to any corresponding non-head fragment of said packet that is received subsequently after the head fragment and to any corresponding stored non-head fragment that is received prior to the head fragment,

wherein said switch is adapted to said apply said determined destination address by addition of a routing tag to said non-head fragments that includes said determined destination address, and

wherein said switch is adapted to said process said head fragment according to at least one of Layer 4 through Layer 7 criteria.

34.   (New) The apparatus of claim 33 wherein said switch is adapted to said apply said determined destination address to said any corresponding non-head fragment that is received subsequently after the head fragment is forwarded to said destination address.